a second trap which filters organic materials from the wastewater,

positioned between the inlet and the metals trap, wherein the second trap at least

partially comprises [one of a phosphate and activated carbon] <u>fish bone char</u>.

2.   (Original) The adsorption apparatus of claim 1 further comprising a pH

controller, adjusting the pH of the wastewater to a predetermined range.

3.   (Original) The adsorption apparatus of claim 2 wherein the predetermined

range is pH 5.5-7.5.

4.   (Original) The adsorption apparatus of claim 1 further comprising a first

trap positioned between the inlet and the second trap which filters solids from the

wastewater of greater than a predetermined size.

5.   (Original) The adsorption apparatus of claim 4 wherein the predetermined

size is about 5 microns.

6.   (Original) The adsorption apparatus of claim 4 wherein the first trap

comprises at least one of silica sand, charcoal, and coal.

7.   (Amended) [The adsorption apparatus of claim 1 wherein the second trap comprises a calcium phosphate] An adsorption apparatus for treatment of wastewater comprising, in combination:

an inlet for the wastewater connected to a metals trap which adsorbs metals; and

a second trap which filters organic materials from the wastewater, positioned between the inlet and the metals trap, wherein the second trap at least partially comprises an insoluble phosphate.

8.   (Amended) The adsorption apparatus of claim [1] 7 wherein the second trap contains bone char.

9.   (Amended) The adsorption apparatus of claim 8 wherein the [second trap contains fish bone char] the insoluble phosphate has a particle size greater than a mesh of 20/60.

10.   (Original) The adsorption apparatus of claim 1 further comprising activated carbon in at least one of the second trap and the metals trap.

11.   (Original) The adsorption apparatus of claim 1 wherein the metals trap comprises a metal oxyhydroxide.

12.   (Amended) The adsorption apparatus of claim 1 further comprising an additional oxidizer incorporated as part of at least one of the metals trap and the second trap.

13.   (Amended) A method of adsorption and removal of impurities from wastewater comprising, in combination the steps of:

restricting a size of the impurities to less than a predetermined size by passing the wastewater through a first chamber containing a solids trap; and

passing the wastewater through a second chamber after passage through the first chamber, the second chamber containing a second trap for organic materials [comprising a phosphate] at least partially comprising fish bone char;

wherein a permanganate is incorporated as part of at least one of the metals trap and the second trap.

14.   (Original) The method of claim 13 further comprising the steps of:

adjusting a pH and a temperature of the wastewater prior to introduction of the wastewater to the first chamber.

15.   (Amended) The method of claim 13 further comprising the step of:

passing the wastewater through a third chamber containing a third trap for adsorption of metals;

wherein [the second trap comprises bone char and] the third trap comprises metal oxyhydroxide.

16.   (Original) The method of claim 15 wherein each chamber is adapted for backwashing, permitting wastewater to be flushed out of each chamber separately.

[17.   (Withdrawn) A method of manufacturing fish bone char comprising, in combination, the steps of:

removing fat and oily residues from fish bone and fish parts;

heating the fish bone and fish parts in a reduced oxygen environment to a temperature of 500-900°C for 5 to 30 hours, producing fish bone char; and

processing the fish bone char to a desired mesh size.

18.   (Withdrawn) The method of manufacturing fish bone char of claim 17 wherein the step of removing fat and oily residues comprises one of rendering and boiling the fish bone and fish parts.

19.   (Withdrawn) The method of manufacturing fish bone char of claim 17 wherein the fish bone char is processed to a mesh size of 4 to 400 mesh.

20.   (Withdrawn) The method of manufacturing fish bone char of claim 19

wherein the fish bone char is processed to a mesh size of 4 to 30 mesh.]